



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/594,071

09/25/2006

Yuuji Tobisaka

SH-0068PCTUS

3356

21254

7590

07/02/2010

MCGINN INTELLECTUAL PROPERTY LAW GROUP, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER

DEGHAN, QUEENIE S

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

07/02/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,071	Applicant(s) TOBISAKA ET AL.	
	Examiner QUEENIE DEGHAN	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 12-19 is/are pending in the application.
- 4a) Of the above claim(s) 5-10 and 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 3-4, 12, 15-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 recites "moving the at least one midway holding device to a vicinity of the at least one rotatable chuck in an elongation process and not during a first phase of heating of the elongation process". It appears the specification does not offer support for a moving step of the holding devices during an elongation process. The holding devices are released to the vicinity of the chucks after welding and before elongation.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1791

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1, 3-4, 12, 15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama et al. (2004/0129027) in view of Kim et al. (WO 2004/009501 as represented by US 2005/0016216). Sugiyama teaches a method for processing a glass base material for optical fiber using an apparatus. The apparatus comprising a pair of rotatable chucks (16) that grasps respective ends of the glass base material (fig. 1, [0022], [0026]) and that are capable of performing relative displacement in an opposing direction (as indicated by arrow in figure 1), a burner for heating the glass base material that is movable along the axial direction as depicted by the arrow on burner (17) in figure 1 ([0022]), and at least one midway holding device (18) in figures 2 and 4 that supports a midway part of the glass base material. Sugiyama further discloses processing the glass base material while preventing the glass base material from being brought into a cantilever state by always supporting the glass base material at two or more points ([0027], [0028], [0036], figures 2-4).

Art Unit: 1791

2. Sugiyama teaches the apparatus can be used for other processes such as attaching dummy rods to elongate the glass base material, but doesn't specify details ([0037]). Kim teaches a similar apparatus comprising chucks (200), a burner (500), and a midway holding device (1100) in figure 3. Kim also teaches during heating of the glass substrate, the holding device is moved and held at a vicinity of the chuck and not moved during the first phase of heating the glass substrate ([0041]-[0042]). Although the steps are taken during a MCVD process, Kim teaches the glass in the initial phase of heating is still rigid and the holding device is moved only after a first phase of heating since the glass becomes soft and needs support. It would have been obvious to one of ordinary skill in the art at the time of the invention to have utilized similar steps in an elongation process since a similar scenario would occur wherein the glass during a first heating phase is still rigid and then moving the support when the glass is heated to a softening point.

3. Regarding claim 3, at least one of the two points at which the glass base material is supported is at the midway part of the glass material, as can be seen in figures 2 & 4.

4. Regarding claims 4 and 12, the glass base material is held at two midway parts (figure 4).

5. Regarding claim 15, Sugiyama discloses utilizing the apparatus for other processes that requires supporting the glass preform such as a welding process for attaching dummy glass rods to elongate the glass preform ([0037]).

6. Regarding claim 19, Sugiyama discloses a movable headstock (15) comprising a rotatable chuck and that moves along the axial direction of the glass base material

Art Unit: 1791

([0022], [0026]). Sugiyama also discloses the holding device (18) is movable along an axial direction of the glass base material and it appears to be independent from the movement of the headstock ([0028], [0022]).

7. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugiyama et al. (2004/0129027) in view of Kim et al. (WO 2004/009501 as represented by US 2005/0016216) as applied to claim 1 above, and further in view of Shimuzu et al. (2002/0148257). Sugiyama discloses utilizing the apparatus for other processes that requires supporting the glass preform in a horizontal lathe such as a welding process for attaching dummy glass rods to elongate the glass preform ([0037]). Shimuzu teaches other processes involving the heating of a glass substrate mounted on a horizontal lathe and held by chucks at either ends. The processes include the welding of dummy rods ([0200], [0212], an elongation process ([0201], [0213], [0215]), flame polishing ([0036]), and spindle shaping ([0216], [0234]). It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the apparatus of Sugiyama and Kim comprising the holding device for any of the processes as taught by Shimizu, such as elongation, flame polishing, and spindle shaping, as these processes involve the heating of the glass preform which would require support for areas of the glass that has softened so as to prevent bending of the glass preform.

8. In further regards with claim 18, the placement of the holding device in a flame polishing step is not particularly disclosed. However, since flame polishing traditionally performed with less temperatures than other process such as elongation, it would be reasonable to expect the holding device to be in the vicinity of the chucks so as to be

Art Unit: 1791

out of the way of the traversing flame for the flame polishing step. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to have expected the holding device of Sugiyama to be at ends of the glass base material, such as at the vicinity of the chucks, since support of the glass base material would not be expected because of the low processing temperature of the flame polishing step of the glass base material.

Response to Arguments

9. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1791

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUEENIE DEGHAN whose telephone number is (571)272-8209. The examiner can normally be reached on Monday through Friday 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Queenie Dehghan/

Examiner, Art Unit 1791